BEST AVAILABLE COPY

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 13 December 2001 (13.12.2001)

PCT

(10) International Publication Number WO 01/94629 A2

(51) International Patent Classification ⁷ :	C12Q 1/68	60/237,598	3 October 2000 (03.10.2000)	US
		60/237,604	3 October 2000 (03.10.2000)	US
(21) International Application Number:	PCT/US01/10838	60/237,606	3 October 2000 (03.10.2000)	US
		60/237,608	3 October 2000 (03.10.2000)	US
(22) International Filing Date: 30 May	2001 (30.05.2001)	60/244,867	1 November 2000 (01.11.2000)	US
		60/245,084	1 November 2000 (01.11.2000)	US
(25) Filing Language:	English			

English

(71) Applicant: AVALON PHARMACEUTICALS [US/US]; 19 Firstfield Road, Gaithersburg, MD 20878 (US).

(72) Inventors: YOUNG, Paul, E.; 122 Beckwith Street, Gaithersburg, MD 20870 (US). AUGUSTUS, Meena; 3215 Hollyhock Drive, Burtonsville, MD 20866 (US). CARTER, Kenneth, C.; 11600 Brandy Hall Lane, North Potomac, MD 20878 (US). EBNER, Reinhard; 9906 Shelburn Terrace #316, Gaithersburg, MD 20878 (US). ENDRESS, Greg; 408 Bridge Road, Florence, MA 01062 (US). HORRIGAN, Steve; 1895 Milboro Drive, Potomac, MD 20854 (US). SOPPET, Daniel, R.; 50 Stillfield Place, Centreville, VA 20120 (US). WEAVER, Zoe; 4615 North Park Avenue 31108, Chevy Chase, MD 20815 (US).

(74) Agents: GRANT, Alan, J. et al.; Carella, Byrne, Bain, Gilfillan, Cecchi, Stewart & Olstein, 6 Becker Farm Road, Roseland, NJ 07068 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- without international search report and to be republished upon receipt of that report
- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau

[Continued on next page]

(10) D 1 1 D 1

60/235,863

60/236.028

60/236,032

60/236,033

60/236,034

60/236,109

60/236,111

60/236.842

60/236,891

60/237,172

60/237.173

60/237,278

60/237,294

60/237,295

60/237,316

60/237,425

(26) Publication Language:

7

Priority Data:		
60/209,473	5 June 2000 (05.06.2000)	US
60/209,531	5 June 2000 (05.06.2000)	US
60/233,133	18 September 2000 (18.09.2000)	US
60/233,617	18 September 2000 (18.09.2000)	US
60/234,009	20 September 2000 (20.09.2000)	US
60/234,034	20 September 2000 (20.09.2000)	US
60/234,052	20 September 2000 (20.09.2000)	US
60/234,509	22 September 2000 (22.09.2000)	US
60/234,567	22 September 2000 (22.09.2000)	US
60/234,923	25 September 2000 (25.09.2000)	US
60/234,924	25 September 2000 (25.09.2000)	US
60/235,077	25 September 2000 (25.09.2000)	US
60/235,082	25 September 2000 (25.09.2000)	US
60/235,134	25 September 2000 (25.09.2000)	US
60/235,280	25 September 2000 (25.09.2000)	US
60/235,637	26 September 2000 (26.09.2000)	US
60/235,638	26 September 2000 (26.09.2000)	US
60/235,711	27 September 2000 (27.09.2000)	US
60/235.720	27 September 2000 (27.09.2000)	US
60/235,840	27 September 2000 (27.09.2000)	US

27 September 2000 (27.09.2000)

28 September 2000 (28.09.2000)

29 September 2000 (29.09.2000)

29 September 2000 (29.09.2000)

2 October 2000 (02.10.2000)

3 October 2000 (03.10.2000)

₹ 67

(54) Title: CANCER GENE DETERMINATION AND THERAPEUTIC SCREENING USING SIGNATURE GENE SETS

US

US

US

US

US

US

US

US

US

US US

US

US

US

US

US

(57) Abstract: Processes for assaying potential antitumor agents based on their modulation of the expression of specified genes, or sets, of suspected cancer cell genes are disclosed, along with methods for diagnosing cancerous, or potentially cancerous, conditions as a result of the expression, or patterns of expression, of such genes, or sets of genes. Also disclosed are methods for determining functionally related genes, or gene sets, as well as methods for treating cancer based on targeting expression products of such genes, or gene sets, and determining genes involved in the cancerous process.